

Serial No.: 09/581,976
Group Art Unit No.: 1648
Class-Subclass 424-192100

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A composition comprising an isolated fusion protein, wherein said composition comprises a Human Papilloma Virus (HPV) protein selected from the group consisting of: E6 protein, E7 protein, and E6/E7 fusion protein, linked to a protein D or a fragment thereof having T helper epitopes from ~~Haemophilus influenza~~ *Haemophilus influenzae* B, lipoprotein D or fragment thereof having T helper epitopes from ~~Haemophilus influenza~~ *Haemophilus influenzae* B, and an immunostimulatory cytosine-guanosine (CpG) containing oligonucleotide.
3. (Previously Presented) A composition as claimed in claim 1 wherein the E6 or E7 proteins are from HPV16 or HPV18.
4. (Previously Presented) A composition as claimed in claim 1 wherein the E7 protein is mutated to reduce the binding for the retinoblastoma gene product.
5. (Previously Presented) A composition as claimed in claim 1 wherein a mutation is introduced into the E6 protein wherein inactivation of the p53 tumour suppressor protein by E6 is eliminated.
6. (Previously Presented) A composition as claimed in claim 1 additionally comprising a histidine tag of at least 4 histidine residues.
7. (Previously Presented) A composition as claimed in claim 1 further comprising an additional HPV antigen wherein the additional HPV antigen is one or more antigens selected from the group consisting of E2, E5, L1 and L2.
8. (Previously Presented) A composition as claimed in claim 1 wherein the immunostimulatory CpG oligonucleotide comprises a hexamer motif: purine purine cytosine guanine pyrimidine pyrimidine (SEQ ID NO:27).

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9. (Previously Presented) A composition as claimed in claim 1 wherein the immunostimulatory CpG oligonucleotide has two or more CpG motifs.
10. (Previously Presented) A composition as claimed in claim 1 wherein the CpG oligonucleotide contains a phosphorothioate inter-nucleotide linkage.
11. (Previously Presented) A composition as claimed in claim 1 wherein the CpG oligonucleotide is selected from the group consisting of:
OLIGO 1: TCC ATG ACG TTC CTG ACG TT (SEQ ID NO:24);
OLIGO 2: TCT CCC AGC GTG CGC CAT (SEQ ID NO:25); and
OLIGO 3: ACC GAT GAC GTC GCC GGT GAC GGC ACC ACG (SEQ ID NO:26).
13. (Previously Presented) A method of inducing an immune response in a patient to an HPV antigen comprising administering a safe and effective amount of a composition as claimed in claim 1.
14. (Previously Presented) A method of preventing or treating HPV induced tumors in a patient comprising administering a safe and effective amount of a composition as claimed in claim 1.
15. (Currently Amended) A method of preparing a composition as claimed in any one of claims 1, or 3-11 comprising admixing an isolated fusion protein selected from the group consisting of: E6 protein, E7 protein, and E6/E7 fusion protein, linked to a protein D or a fragment thereof having T helper epitopes from ~~Heamophilus influenza~~ *Haemophilus influenzae* B, lipoprotein D or fragment thereof having T helper epitopes from ~~Heamophilus influenza~~ *Haemophilus influenzae* B, and an immunostimulatory CpG oligonucleotide.